

Soybean Herbicide Programs for Giant Ragweed

Janesville, WI 2024

Trial Information

Trial Sponsor: BASF, FMC, Valent, Wisconsin Cropping Systems Weed Science

Objective: Evaluate several 2- and 3-pass herbicide programs for season-long giant ragweed control and soybean yield

Crop: Soybean

Hybrid: NK22-C4E3

Weed species (pressure): giant ragweed (moderate-high)

Herbicide Application(s): PRE – 5/15
EPOST – 5/29 (VC soybean)
MPOST – 6/11 (V1/V2 soybean)
POST – 6/25 (V5 soybean)
LPOST – 7/1 (V6 soybean)

For the full report see trial #24-ROK-SB21 in the [2024 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

Soybean Herbicide Programs for G. Ragweed (Janesville, WI 2024)

Trt #	Herbicide (rate acre ⁻¹)	Soybean Injury (%)			Canopy	Giant Ragweed (%)					Yield ^b bu acre ⁻¹	
		6/4	6/11	6/25		6/4	6/11	6/25	7/8	9/18		
1	Untreated Check	0	0	0	-	0	0	0	0	0	6 c	
Two-Pass – EPOST (5/15) fb POST (6/25)					POST							
3	FirstRate (0.6 oz) + Dual II Magnum (1.3 pt) + Roundup PM3 (20 oz) + AMS ^d fb Liberty (32 oz) + Roundup PowerMAX3 (26 oz) + AMS ^c	1.3	9.3	3.5	55	94	93	79	98	99	71 a	
4	Prefix (2.33 pt) + Pursuit (4 oz) + Roundup PM3 (20 oz) + AMS ^d fb Liberty (32 oz) + Roundup PowerMAX3 (26 oz) + AMS ^c	15.0	16.8	10.3	48	95	95	81	99	99	72 a	
Two-Pass – PRE (5/15) fb MPOST (6/11)		MPOST			MPOST							
2	Authority First (5 oz) fb Roundup PowerMAX3 + AMS ^c	0.3	1.8	2.0	58	85	87	89	87	84	68 a	
5	Fierce XLT (3.75 oz) fb Liberty (32 oz) + Perpetuo (6 oz) + COC (1% v/v) + AMS ^c	6.5	6.0	16.5	50	79	76	93	83	67	64 ab	
6	Valor XLT (5 oz) fb Liberty (32 oz) + Perpetuo (6 oz) + COC (1% v/v) + AMS ^c	9.0	7.5	15.8	48	88	83	94	86	78	68 a	
7	Tendovo (2.1 qt) fb Flexstar GT (3.5 pt) + NIS (0.25% v/v) + AMS ^c	0.0	4.3	7.3	53	86	87	94	92	92	68 a	
8	Authority First (6.4 oz) + Anthem Maxx (3 fl oz) fb Liberty (32 oz) + Flexstar (1 pt) + COC (1% v/v) + AMS ^c	2.0	1.5	12.0	52	84	82	99	95	94	73 a	
9	Zidua PRO (6 oz) fb Liberty ULTRA (24 oz) + Enlist One (2 pt) + Roundup PM3 (20 oz) + AMS ^c	0.0	0.8	5.5	56	63	55	98	92	87	71 a	
10	Zidua PRO (6 oz) fb Liberty ULTRA (29 oz) + Roundup PM3 (30 oz) + AMS ^c	0.0	0.0	2.3	57	70	61	91	84	78	60 ab	
12	Surveil (4.2 oz) fb Basagran 5L (1.6 pt) + Poast (1 pt) + MSO (1% v/v) + AMS ^c	9.0	8.5	5.8	55	88	83	89	78	66	55 b	
13	Surveil (4.2 oz) fb Flexstar (1 pt) + Poast (1 pt) + MSO (1% v/v) + AMS ^c	7.3	7.5	13.5	48	90	86	96	90	86	64 ab	
14	Surveil (4.2 oz) fb Flexstar (1 pt) + Basagran 5L (1.6 pt) + Poast (1 pt) + MSO (1% v/v) + AMS ^c	9.0	8.0	22.8	36	87	84	96	90	85	66 ab	
Three-Pass – PRE (5/15) fb MPOST (6/11) fb LPOST (7/1)					LPOST							
15	Storm (1.5 pt) + Poast (1 pt) + COC (1% v/v) + AMS ^c fb Basagran 5L (1.6 pt) + COC (1% v/v) + AMS ^c	8.8	8.3	27.8	33	84	87	95	97	94	66 ab	
11	Surveil (4.2 oz) fb Liberty (32 oz) + Roundup PM3 (26 oz) + AMS ^c fb Liberty (32 oz) + AMS ^c	8.5	8.5	10.0	48	89	86	95	100	100	67 a	
		LSD ($\alpha=0.10$)	2.4	4.1	3.8	4	9	9	5	7	12	7
		p value	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001

^bYield values with the same letter are not significantly different.

^cAMS = AMSOL/Dry, ^dapplied at 3 lb/a; ^eapplied at 8.5 lb/100 gal.

Soybean Herbicide Programs for Giant Ragweed

Janesville, WI 2024

Plot pictures taken on 6/4

20 days after the PRE application
6 days after the EPOST application

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

**20 days after PRE (6/4)
Untreated Check**

0%



6 days after EPOST (6/4)

94%

EPOST: 0.6 oz FirstRate + 1.3 pt Dual II Magnum + 20 oz RU PM3 + AMS



6 days after EPOST (6/4)

95%

EPOST: 2.33 pt Prefix + 4 oz Pursuit + 20 oz Roundup PM3 + AMS



**20 days after PRE (6/4)
PRE: 5 oz Authority First**

85%



**20 days after PRE (6/4)
PRE: 3.75 oz Fierce XLT**

79%



**20 days after PRE (6/4)
PRE: 5 oz Valor XLT**

88%



**20 days after PRE (6/4)
PRE: 2.1 qt Tendovo**

86%



20 days after PRE (6/4)

PRE: 6.4 oz Authority First + 3 oz Anthem Maxx

84%



**20 days after PRE (6/4)
PRE: 6 oz Zidua PRO**

67%



20 days after PRE (6/4)
PRE: 4.2 oz Surveil

88%



Soybean Herbicide Programs for Giant Ragweed

Janesville, WI 2024

Plot pictures taken on 6/11

27 days after the PRE application

13 days after the EPOST application

The day of the MPOST application

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

**27 days after PRE (6/11)
Untreated Check**

0%



13 days after EPOST (6/11)

93%

EPOST: 0.6 oz FirstRate + 1.3 pt Dual II Magnum + 20 oz RU PM3 + AMS



13 days after EPOST (6/11)

95%

EPOST: 2.33 pt Prefix + 4 oz Pursuit + 20 oz Roundup PM3 + AMS



**27 days after PRE (6/11)
PRE: 5 oz Authority First**

87%



**27 days after PRE (6/11)
PRE: 3.75 oz Fierce XLT**

76%



27 days after PRE (6/11)

PRE: 5 oz Valor XLT

83%



27 days after PRE (6/11)
PRE: 2.1 qt Tendovo

87%



27 days after PRE (6/11)

82%

PRE: 6.4 oz Authority First + 3 oz Anthem Maxx



27 days after PRE (6/11)

PRE: 6 oz Zidua PRO

58%



27 days after PRE (6/11)

PRE: 4.2 oz Surveil

85%



Soybean Herbicide Programs for Giant Ragweed

Janesville, WI 2024

Plot pictures taken on 6/25

41 days after the PRE application

27 days after the EPOST application

14 days after the MPOST application

The day of the POST application

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

41 days after PRE (6/25)

Untreated Check

0%



27 days after EPOST (6/25)

EPOST: 0.6 oz FirstRate + 1.3 pt Dual II Magnum + 20 oz RU PM3 + AMS

79%



27 days after EPOST (6/25)

EPOST: 2.33 pt Prefix + 4 oz Pursuit + 20 oz Roundup PM3 + AMS

81%



14 days after MPOST (6/25)

PRE: 5 oz Authority First *fb*

MPOST: 30 oz Roundup PowerMAX3 + AMS

89%



14 days after MPOST (6/25)

PRE: 3.75 oz Fierce XLT *fb*

MPOST: 32 oz Liberty + 6 oz Perpetuo + COC + AMS

93%



14 days after MPOST (6/25)

PRE: 5 oz Valor XLT *fb*

MPOST: 32 oz Liberty + 6 oz Perpetuo + COC + AMS

94%



14 days after MPOST (6/25)

PRE: 2.1 qt Tendovo *fb*

MPOST: 3.5 pt Flexstar GT + NIS + AMS

94%



14 days after MPOST (6/25)

PRE: 6.4 oz Authority First + 3 oz Anthem Maxx *fb*

MPOST: 32 oz Liberty + 1 pt Flexstar + COC + AMS

99%



14 days after MPOST (6/25)

PRE: 6 oz Zidua PRO fb

98%

MPOST: 24 oz Liberty ULTRA + 2 pt Enlist One + 20 oz RU PM3 + AMS



14 days after MPOST (6/25)

PRE: 6 oz Zidua PRO *fb*

MPOST: 24 oz Liberty ULTRA + 30 oz Roundup PM3 + AMS

91%



14 days after MPOST (6/25)

PRE: 4.2 oz Surveil *fb*

MPOST: 1.6 pt Basagran 5L + 1 pt Poast + MSO + AMS

89%



14 days after MPOST (6/25)

PRE: 4.2 oz Surveil *fb*

MPOST: 1 pt Flexstar + 1 pt Poast + MSO + AMS

96%



14 days after MPOST (6/25)

PRE: 4.2 oz Surveil *fb*

MPOST: 1 pt Flexstar + 1.6 pt Basagran 5L + 1 pt Poast + MSO + AMS

96%



14 days after MPOST (6/25)

PRE: 4.2 oz Surveil *fb*

MPOST: 1.5 pt Storm + 1 pt Poast + COC + AMS

95%



14 days after MPOST (6/25)

PRE: 4.2 oz Surveil *fb*

MPOST: 32 oz Liberty + 26 oz Roundup PM3 + AMS

95%



Soybean Herbicide Programs for Giant Ragweed

Janesville, WI 2024

Plot pictures taken on 7/8

54 days after the PRE application

40 days after the EPOST application

27 days after the MPOST application

13 days after the POST application

7 days after the LPOST application

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

54 days after PRE (7/8)
Untreated Check

0%



13 days after POST (7/8)

EPOST: 0.6 oz FirstRate + 1.3 pt Dual II Magnum + 20 oz RU PM3 + AMS *fb* 98%

POST: 32 oz Liberty + 26 oz Roundup PowerMAX3 + AMS



13 days after POST (7/8)

EPOST: 2.33 pt Prefix + 4 oz Pursuit + 20 oz Roundup PM3 + AMS *fb*

99%

POST: 32 oz Liberty + 26 oz Roundup PowerMAX3 + AMS



27 days after MPOST (7/8)

PRE: 5 oz Authority First *fb*

MPOST: 30 oz Roundup PowerMAX3 + AMS

87%



27 days after MPOST (7/8)

PRE: 3.75 oz Fierce XLT *fb*

MPOST: 32 oz Liberty + 6 oz Perpetuo + COC + AMS

83%



27 days after MPOST (7/8)

PRE: 5 oz Valor XLT *fb*

MPOST: 32 oz Liberty + 6 oz Perpetuo + COC + AMS

86%



27 days after MPOST (7/8)

PRE: 2.1 qt Tendovo *fb*

MPOST: 3.5 pt Flexstar GT + NIS + AMS

92%



27 days after MPOST (7/8)

PRE: 6.4 oz Authority First + 3 oz Anthem Maxx *fb*

MPOST: 32 oz Liberty + 1 pt Flexstar + COC + AMS

95%



27 days after MPOST (7/8)

PRE: 6 oz Zidua PRO *fb*

MPOST: 24 oz Liberty ULTRA + 2 pt Enlist One + 20 oz RU PM3 + AMS

92%



27 days after MPOST (7/8)

PRE: 6 oz Zidua PRO *fb*

MPOST: 24 oz Liberty ULTRA + 30 oz Roundup PM3 + AMS

84%



27 days after MPOST (7/8)

PRE: 4.2 oz Surveil *fb*

MPOST: 1.6 pt Basagran 5L + 1 pt Poast + MSO + AMS

78%



27 days after MPOST (7/8)

PRE: 4.2 oz Surveil *fb*

MPOST: 1 pt Flexstar + 1 pt Poast + MSO + AMS

90%



27 days after MPOST (7/8)

PRE: 4.2 oz Surveil *fb*

MPOST: 1 pt Flexstar + 1.6 pt Basagran 5L + 1 pt Poast + MSO + AMS

90%



7 days after LPOST (7/8)

PRE: 4.2 oz Surveil *fb*

MPOST: 1.5 pt Storm + 1 pt Poast + COC + AMS *fb*

LPOST: 1.6 pt Basagran 5L + COC + AMS

97%



7 days after LPOST (7/8)

PRE: 4.2 oz Surveil *fb*

MPOST: 32 oz Liberty + 26 oz Roundup PM3 + AMS *fb*

LPOST: 32 oz Liberty + AMS

100%



Soybean Herbicide Programs for Giant Ragweed

Janesville, WI 2024

Plot pictures taken on 9/27
The day of soybean harvest

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

Soybean Harvest (9/27)

Untreated Check

0%



Soybean Harvest (9/27)

EPOST: 0.6 oz FirstRate + 1.3 pt Dual II Magnum + 20 oz RU PM3 + AMS *fb* 99%

POST: 32 oz Liberty + 26 oz Roundup PowerMAX3 + AMS



Soybean Harvest (9/27)

EPOST: 2.33 pt Prefix + 4 oz Pursuit + 20 oz Roundup PM3 + AMS *fb*

99%

POST: 32 oz Liberty + 26 oz Roundup PowerMAX3 + AMS



Soybean Harvest (9/27)

PRE: 5 oz Authority First fb

MPOST: 30 oz Roundup PowerMAX3 + AMS

84%



Soybean Harvest (9/27)

PRE: 3.75 oz Fierce XLT fb

MPOST: 32 oz Liberty + 6 oz Perpetuo + COC + AMS

67%



Soybean Harvest (9/27)

PRE: 5 oz Valor XLT fb

MPOST: 32 oz Liberty + 6 oz Perpetuo + COC + AMS

78%



Soybean Harvest (9/27)

PRE: 2.1 qt Tendovo *fb*

MPOST: 3.5 pt Flexstar GT + NIS + AMS

92%



Soybean Harvest (9/27)

PRE: 6.4 oz Authority First + 3 oz Anthem Maxx *fb*

MPOST: 32 oz Liberty + 1 pt Flexstar + COC + AMS

94%



Soybean Harvest (9/27)

PRE: 6 oz Zidua PRO fb

MPOST: 24 oz Liberty ULTRA + 2 pt Enlist One + 20 oz RU PM3 + AMS

87%



Soybean Harvest (9/27)

PRE: 6 oz Zidua PRO fb

MPOST: 24 oz Liberty ULTRA + 30 oz Roundup PM3 + AMS

78%



Soybean Harvest (9/27)

PRE: 4.2 oz Surveil *fb*

MPOST: 1.6 pt Basagran 5L + 1 pt Poast + MSO + AMS

66%



Soybean Harvest (9/27)

PRE: 4.2 oz Surveil *fb*

MPOST: 1 pt Flexstar + 1 pt Poast + MSO + AMS

86%



Soybean Harvest (9/27)

PRE: 4.2 oz Surveil fb

MPOST: 1 pt Flexstar + 1.6 pt Basagran 5L + 1 pt Poast + MSO + AMS

85%



Soybean Harvest (9/27)

PRE: 4.2 oz Surveil *fb*

MPOST: 1.5 pt Storm + 1 pt Poast + COC + AMS *fb*

LPOST: 1.6 pt Basagran 5L + COC + AMS

94%



Soybean Harvest (9/27)

PRE: 4.2 oz Surveil *fb*

MPOST: 32 oz Liberty + 26 oz Roundup PM3 + AMS *fb*

LPOST: 32 oz Liberty + AMS

100%

